sub-stan-tial

sub-stan-tial (stb-sttntshtll) adjective

- 1. Of, relating to, or having substance; material.
- 2. True or real; not imaginary.
- 3. Solidly built; strong.
- 4. Ample; sustaining: a substantial breakfast.
- 5. Considerable in importance, value, degree, amount, or extent: won by a substantial margin.
- 6. Possessing wealth or property; well-to-do.

noun

- 1. An essential. Often used in the plural.
- 2. A solid thing. Often used in the plural.

[Middle English substancial, from Old French substantiel, from Latin substanti lis, from substantia, substance.]

- sub-stan ti-al i-ty (-sh + f \rightarrow t) or sub-stan tial-ness (-sh \leftarrow s) noun
- sub-stan tial-ly adverb

The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.

u·ni·form

u·ni·form (y⊕ ⊕⊕förm⊕) adjective

- 1. Always the same, as in character or degree; unvarying.
- 2. Conforming to one principle, standard, or rule; consistent.
- 3. Being the same as or consonant with another or others.
- 4. Unvaried in texture, color, or design. See synonyms at steady.

noun

- 1. A distinctive outfit intended to identify those who wear it as members of a specific group.
- 2. One set of such an outfit.

verb, transitive

u·ni·formed, u·ni·form·ing, u·ni·forms

- 1. To make (something) uniform.
- 2. To provide or dress with a uniform.

[Latin niformis: ni-, uni- + f ma, shape.]

- u ni-for mi-ty or u ni-form ness (y n ⊣tôrm) noun
- --- u ni-form ly adverb

The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.

DOCUMENT-IDENTIFIER:

US 20010003058 A1

Ø 鹦

Ø * *

->|

M

Q.

Q

Ø

Ö

•

Q

D

Ð

a

w)

Þ

8

B

W

Q.

Ø

temperatures.

Flip chip with

integrated flux and underfill

----- KWIC -----

Application Filing Date - APD (1): 20001206

Detail Description Paragraph - DETX (18): [0034] The positioned chip is then run through a solder reflow line commonly used for assembly. A multi-zone oven, with individual heat controls that permit a heating profile is preferred. flux melts at a temperature ranging from about 80.degree. C. to about 140.degree. C. The melting point is determined by selecting fluxes having epoxy resins with the appropriate melting

point. The flux/hardener, formed of one or more carboxylic acids, one or more acid anhydrides, or a combination of both, reduces oxides present on the solder

or the metal surface in contact with the

solder and allows solder joints to form at the substrate pads. The liquefied

flux/underfill also wets the

substrate and begins to bond. As the ambient temperature increases, (by moving the assembly into hotter oven zones), the flux-hardener reacts with the epoxy resins to form a mostly linear, or thermoplastic, polymer with a final softening point of at least 130.degree. C. and up to about 190.degree. C. The final softening point is determined by the melting point of the initial resins and the particular type or hardener selected. The final temperature should be selected so that it is not so low that the underfill material softens during device use, nor should it be so high as to result in excessive reworking

an United States

(23) Patent Application Publication (25) Pub. No.: US 2001/0003058 A1 (43) Pub. Date: Jun. 7, 2001

(S4) PLIP CHIP WITH INTEGRATED FLUX AND UNDERSTILE.

m, MA 02)11 (US)

09,730,314

Dec. 6, 2000 ed U.S. Application Date

(63) Division of application No. 09.260,212, find on Man. 10, 1999, now Pat. No. 5,194,785.

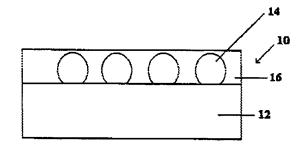
Patriculus Clerett (5:) Int. Ct. ..

..... HOLL 21/44, B329 1/00

H211 11/40 H011 11/30 H313 514; F571 23/48; H311 23/20 H011 23/06; H011 23/20 43/417; 427/426; 43/207 428/929; 431/727; 438/457; (E) E4 CL

ABSTRACT

A hip ohip booking solder bromps and an integrated flow and underful, or well as methods for making soon a device, its described. The resoluting device is well neight for a sample constate purplication to a prunnel dermit bound, shrowly schapilizing the polyn memberstrong processors whosh ben-tufnes have manifeed amporter floating and underfitting range.



O Details 製 Text 智 Image 豐 HTML KMC

*

☑ Deteits III Text 22 Image 整 HTML